

Title (en)  
ONE-USE RETRACTING SYRINGE WITH POSITIVE NEEDLE RETENTION

Title (de)  
ZURÜCKZIEHBARE EINWEGSPRITZE MIT POSITIVEM NADELHALTER

Title (fr)  
SERINGUE RETRACTABLE A USAGE UNIQUE A RETENTION D'AIGUILLE FRANCHE

Publication  
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Application  
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Abstract (en)  
[origin: US6494863B1] A retracting syringe of one use has a plunger comprising a handle portion and a needle retention portion forward of the handle portion. A positive locking structure in the syringe barrel ensures the syringe is not reused. In one embodiment, the positive locking structure is a stop in the syringe barrel. The handle portion separates after one use and is removed from the syringe. In a second embodiment, the handle portion has a plurality of stepped serrations and the positive locking structure is a clip which is movable with respect to both the handle portion and the barrel. In a third embodiment, the positive locking structure is a clip fixed in an enlarged back opening of the barrel with springing points which are protected from a plurality of stepped serrations on the handle portion by a sliding collar. This one use feature can be applied to a nonretracting syringe.

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Citation (search report)  
• [XAY] WO 9707839 A1 19970306 - MDC INVEST HOLDINGS INC [US]  
• [YA] EP 0341281 B1 19930324  
• [YA] WO 8909630 A1 19891019 - BADER MOHANDES [DE]  
• [XAY] US 5407431 A 19950418 - BOTICH MICHAEL J [US], et al  
• [YA] FR 2701398 A1 19940819 - LEFEVRE LUCIEN [FR]  
• [XY] US 6409701 B1 20020625 - COHN SIMON [US], et al  
• [YA] US 5037394 A 19910806 - MAZURIK SERGEI M [SU], et al  
• See references of WO 2004060451A1

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